

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application;

--1. (Currently Amended) A recording apparatus comprising:

laser-light emitting means for emitting laser light to a loaded disk;

detecting means for detecting light reflected from the loaded disk;

driving means for rotating the loaded disk;

determination means for determining a type of the loaded disk;

driving control means for controlling the driving means according to a result of determination performed by the determination means, so as to perform rotation driving at one of a constant angular velocity and at a constant linear velocity; and

recording control means for executing recording for the loaded disk in a state in which the driving control means performs rotation driving control[[]];

wherein the detecting means comprises reflected-light detecting means for detecting an amount of light reflected from the loaded disk, and

the determination means determines the type of the loaded disk according to a detection output of the reflected-light detecting means.

--2. (Cancelled)

--3. (Currently Amended) The recording apparatus according to claim [[2]] 1, wherein the driving control means controls the driving means so as to perform rotation driving at the constant linear velocity when the loaded disk has a reflectivity higher than a predetermined reflectivity, and so as to perform rotation driving at the constant angular velocity when the loaded disk has a reflectivity lower than the predetermined reflectivity.

--4. (Currently Amended) [[The]] A recording apparatus according to claim 1, laser-light emitting means for emitting laser light to a loaded disk;

detecting means for detecting light reflected from the loaded disk;

driving means for rotating the loaded disk;

determination means for determining a type of the loaded disk;

driving control means for controlling the driving means according to a result of determination performed by the determination means, so as to perform rotation driving at one of a constant angular velocity and at a constant linear velocity; and

recording control means for executing recording for the loaded disk in a state in which the driving control means performs rotation driving control,

wherein the driving control means controls the driving means so as to perform rotation driving at the constant linear velocity when the loaded disk is a recordable disk, and so as to perform rotation driving at the constant angular velocity when the loaded disk is a rewritable disk.

--5. (Cancelled)

--6. (Currently Amended) A recording apparatus comprising:

reading means for reading data from a loaded disk;

determining means for determining a type of recording from data recorded into the loaded disk, according to a reading output of the reading means;

driving means for rotating the loaded disk;

driving control means for controlling the loaded disk according to a determination output of the determination means so as to perform rotation driving at a one of constant angular velocity and a constant linear velocity; and

recording control means for executing recording for the loaded disk in a state in which the driving control means performs rotation driving control[[.]];

wherein the determination means determines whether a track recorded into the loaded disk is closed, and, when the track is not closed, determines the type of recording according to packet information recorded into the loaded disk.

--7. (Cancelled)

--8. (Currently Amended) The recording apparatus according to claim [[7]] 6, wherein the driving control means controls so as to perform rotation driving at the constant angular velocity when the determination means determines that the packet information indicates fixed-length packet recording, in which a data length of a packet is fixed, and so as to perform rotation driving at the constant linear velocity when the determination means determines that the packet information indicates variable-length packet recording, in which the data length of a packet is variable.

--9. (Previously Presented) A recording apparatus comprising:

reading means for reading data from a loaded disk;

detecting means for detecting substituted-area-identification information indicating whether a substituted area is used in the loaded disk, according to a reading output of the reading means;

driving means for rotating the loaded disk;

driving control means for controlling the driving means according to the substituted-area-identification information so as to perform rotation driving at one of a constant angular velocity and a constant linear velocity; and

recording control means for executing recording for the loaded disk in a state in which the driving control means performs rotation driving control.

--10. (Previously Presented) The recording apparatus according to claim 9, wherein the driving control means controls according to the substituted-area-identification information so as to perform rotation driving at the constant angular velocity when a substituted area is found and so as to perform rotation driving at the constant linear velocity when the substituted area is not found.

--11. (Currently Amended) A recording apparatus comprising:

input means for inputting at least a recording command from outside the recording apparatus;

driving means for rotating a disk loaded into the apparatus;

determination means for determining whether initialization is required for the disk, when the recording command is input; and

driving control means for controlling the driving means according to a result [[a]] of a determination performed by the determination means, so as to perform rotation driving at ~~one~~ of a constant angular velocity [[and]] or a constant linear velocity based on the result of the determination.

--12. (Currently Amended) The recording apparatus according to claim 11, wherein the driving control means controls ~~so as~~ the driving means to perform rotation driving at

the constant linear velocity when the initialization is performed ~~so as~~ to perform rotation driving at the constant angular velocity when recording processing for recording data is performed.

--13. (Currently Amended) A recording apparatus comprising:

reading means for reading data from a loaded disk;

detecting means for detecting recording-start-position information according to data read by the reading means;

driving means for rotating the loaded disk;

driving control means for controlling the driving ~~[[mens]]~~ means according to the recording-start-position information so as to perform rotation driving at one of a constant angular velocity and a constant linear velocity; and

recording control means for executing recording for the loaded disk in a state in which the driving control means performs rotation driving control.

--14. (Previously Presented) The recording apparatus according to claim 13, wherein the driving control means controls so as to perform rotation driving at the constant linear velocity when a recording-start position is located at a position inside a predetermined radial position, and so as to perform rotation driving at the constant angular velocity when the recording-start position is located at a position outside the predetermined radial position.

--15. (Previously Presented) The recording apparatus according to claim 13, wherein the driving control means controls to perform rotation driving at the constant linear velocity when a recording-start position is located at a position inside a predetermined radial position and starts recording, and switches the control so as to perform rotation driving at the constant angular velocity when a recording position is shifted to a position outside the predetermined radial position.

--16. (Currently Amended) A recording method comprising:  
a determination step of determining a type of a loaded disk;

a step of controlling according to a result of the determination step so as to rotate the loaded disk at one of a constant angular velocity and a constant linear velocity; and

a step of executing recording in a state in which the loaded disk is rotated[[.]];

wherein the determination step comprises:

a step of emitting laser light to the loaded disk; and

a reflected-light detecting step of detecting light reflected from the loaded disk, and

the disk is rotated according to a result of detection in the reflected-light detecting step at one of a constant angular velocity and a constant linear velocity, and

wherein the reflected-light detecting step comprises a step of detecting an amount of light reflected from the loaded

disk.

--17. and 18. (Cancelled)

--19. (Currently Amended) The recording method according to claim ~~[[17]]~~ 16, wherein the reflected-light detecting step comprises a step of reading type-identification information indicating a type of the loaded disk from the loaded disk.

--20. (Currently Amended) ~~[[The]]~~ A recording method according to claim 17, comprising: a determination step of determining a type of a loaded disk;

a step of controlling according to a result of the determination step so as to rotate the loaded disk at one of a constant angular velocity and a constant linear velocity; and

a step of executing recording in a state in which the loaded disk is rotated;

wherein the determination step comprises:

a step of emitting laser light to the loaded disk; and

a reflected-light detecting step of detecting light reflected from the loaded disk, and

the disk is rotated according to a result of detection in the reflected-light detecting step at one of a constant angular velocity and a constant linear velocity, and

wherein whether the loaded disk is one of a recordable disk and a rewritable disk is determined in the determination step.



--21. (Currently Amended) A recording method comprising:  
 a recording-type detecting step of detecting a type of recording of data recorded into a disk;

a step of controlling, according to the type of recording used for the disk, so as to rotate the disk at one of a constant angular velocity and a constant linear velocity; and

a step of executing recording for the disk in a state in which the disk is rotated[[.]]<sub>L</sub>

wherein the recording-type detecting step comprises a step of determining whether a track recorded into the disk is closed.

--22. (Cancelled)

--23. (Currently Amended) The recording method according to claim [[22]] 21, wherein the recording-type detecting step further comprises:

a step of detecting packet information recorded into the disk, wherein

control is performed according to the packet information so as to rotate the disk at one of a constant angular velocity and a constant linear velocity when it is determined that the track is not closed.

--24. (Previously Presented) A recording method comprising:

a step of reading from a loaded disk substituted-area-

identification information indicating whether the loaded disk is provided with a substituted area;

a step of rotating the loaded disk at one of a constant angular velocity and a constant linear velocity according to the substituted-area-identification information; and

a step of executing recording for the disk in a state in which the disk is rotated.

--25. and 26. (Cancelled)

--27. (Previously Presented) A recording method comprising:

a step of reading from a loaded disk recording-start-position information for the loaded disk;

a step of controlling, according to the recording-start-position information, so as to rotate the loaded disk at one of a constant angular velocity and a constant linear velocity; and

a step of executing recording for the loaded disk in a state in which the loaded disk is rotated.

--28. (Currently Amended) The recording method according to claim [[17]] 27, wherein control is performed so as to perform rotation driving at the constant linear velocity when a recording-start position is located at a position inside a predetermined radial position, and so as to perform rotation driving at the constant angular velocity when the recording-start position is located at a position outside the predetermined radial position.

--29. (Previously Presented) The recording method according to claim 27, wherein control is performed to perform rotation driving at the constant linear velocity when a recording-start position is located at a position inside a predetermined radial position and recording is started, and the control is switched so as to perform rotation driving at the constant angular velocity when a recording position is shifted to a position outside the predetermined radial position.